

WISCONSIN GEOLOGICAL AND

NATURAL HISTORY SURVEY.

E. A. BIRGE, Director.

Hydrographic Map

OF

180318

Elkhart Lake,

Sheboygan County, Wis.

Hydrography in Charge of L. S. Smith.

Field Work by L. S. SMITH and

H. M. TRIPPE, 1898.

MADISON, WISCONSIN

1899

Explanation of Map.



This map shows, by means of contour lines and tints, the depth of water in Elkhart lake. Half of the soundings on which the map is based were made during the winter of 1897-8 through the ice. Lines of soundings were run across the lake in various directions and the position of each sounding was carefully determined by means of chain and transit. During the following summer the lake was again visited, the outline more accurately determined, and an equal number of additional soundings were made. The position of the important soundings is indicated on the map by means of black dots. The outline of the lake indicates, of course, the outline of the water at its level in 1898. The line marked "10" indicates the ten foot level and is drawn through the points where the water would have a depth of 10 feet. It shows also what the outline of the lake would be if the water were lowered 10 feet. The next line marks the depth of 20 feet, and so on with the succeeding lines. The space between any line and that next inside it indicates the distance required for the depth of the water to increase 10 feet. The lines, therefore, indicate the slope of the bottom. Where they are close together the slope is steep, where they are far apart the slope is correspondingly gradual. It will be seen that the lake consists of two basins; the western and smaller one sloping rather steeply and regularly, to a depth of over 85 feet, while the eastern and larger basin, reaches in a similar way a depth of over 113 feet.

In order to make plainer the shape of the basin, the depth of the water has been indicated by a blue color printed in four tints. The shoaler water to a depth of 30 feet has the lightest tint; the second tint indicates the depth from 30 to 60 feet; the third, from 60 to 90 feet; and the deepest tint is given to the deep water below 90 feet in the eastern basin.

In the sections of the lake the horizontal scale is the same as that of the map, but the vertical scale has been magnified twice. This enlargement of the vertical scale necessarily exaggerates the steepness of the slope of the bottom in the same proportion.

So far as known, Elkhart lake is the deepest inland lake in the state except Green lake and lake Geneva. In proportion to its area it is the deepest of the inland lakes, which have been sounded.

HYDROGRAPHIC MAP OF ELKHART LAKE, SHEBOYGAN CO. WIS.

PREPARED FROM SURVEYS BY THE

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

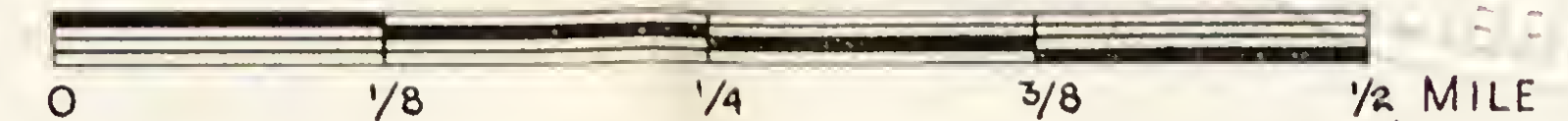
E. A. BIRGE, PH.D. DIRECTOR.

Hydrography in charge of L. S. Smith C.E.

FIELD WORK BY L. S. SMITH AND H. M. TRIPPE

Contour Interval = 10 Ft.

SCALE IN MILES



1898.



NOTE.

THE VERTICAL SCALE OF THESE PROFILES HAS BEEN
MAGNIFIED TWO TIMES.